

Low-voltage circuit-breakers



MCCB or ACB?

- Standard does not differentiate between ACB and MCCB

- category A: no time delay (MCCB= category A)

category B: time delay
(ACB = category B)

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IEC60947-2 cancels and replaces IEC157. The following are some aspects where confusion can occur.

molded case and power circuit-breakers

The IEC standards (and the symbols) do not make any distinction between molded case circuit-breakers (MCCB) and power circuit-breakers commonly called air circuit-breakers (ACB) or metal frame circuit-breakers. For IEC an air circuit-breaker is one in which the contacts open and close in air at atmospheric pressure as opposed to a vacuum circuit-breaker or a gas circuit-breaker. Since for both ACBs and MCCBs the contacts are in air at atmospheric pressure, both types of circuit-breakers are considered air-break and clients may end up not getting what they thought they had specified.

Generally MCCBs are category A meaning no short-circuit trip delay. ACBs are category B meaning provision of a short-circuit time delay. Some large MCCBs are category B however.